

Amendments to the Drawings

Applicants have amended the drawings to correct several reference characters in view of the specification. In FIG. 5, reference S_H has been replaced with S_M (Page 5, line 27). In FIG. 7, references, G, S_4 and G' are replaced respectively by Q, S_Q and Q' (Page 7, lines 21-23), PH is replaced by PH' (Page 7, line 29), S_n is replaced by S_M (Page 8, line 1) and reference S_{ante} is replaced by S_{OTHER} (Page 8, line 6). Replacement sheets 2/3 and 3/3 are enclosed.

REMARKS

In response to the Office Action dated April 3, 2006, Applicants respectfully request reconsideration. Claims 1-8 were previously pending in this application. Claims 1, 3 and 4 have been amended herein. New claims 9-20 have been added to more fully define Applicants' contribution to the art. No new matter has been added.

Allowable Subject Matter

As a preliminary matter, Applicants note with appreciation the indication of allowable subject matter in claims 4-8.

Claim Objections

The Office Action objected to claim 4 because the preamble recited "the method" instead of "the circuit." Accordingly, claim 4 has been amended to recite "the circuit."

Rejections Under 35 U.S.C. §102

The Office Action rejected claims 1-3 under 35 U.S.C. §102(b) as being anticipated by Applicants' admitted prior art, FIG. 1. The Office Action also rejected claims 1-3 under 35 U.S.C. §102(b) as being anticipated by Akimoto et al. (4,709,268). Applicants respectfully request reconsideration.

The system shown in Applicants' FIG. 1 provides a driving signal S_c to V.C.O. 26. When parasitic pulses are present in signal S_{HS} , the driving signal S_c varies in the same direction for each parasitic pulse. As a consequence, the frequency of oscillating signal S_o is disturbed due to the accumulated effect of the parasitic pulses on capacitor 24 (Page 3, lines 17-24, FIGS 1-4).

Akimoto et al. describes an equalizing pulse remover 12 that removes unwanted equalizing pulses from a horizontal synchronization signal. After removing the equalizing pulses, equalizing pulse remover 12 provides the horizontal synchronization signal to a phase comparator 18.

Claim 1 as amended recites:

A method for providing a horizontal scan control signal for a TV set from a horizontal synchronization signal contained in a composite video signal, the horizontal synchronization signal containing horizontal synchronization pulses and parasitic pulses, said scan control signal being provided from an oscillating

signal generated by an oscillator of a phase-locked loop receiving the horizontal synchronization signal, said oscillating signal having a frequency depending on a driving signal provided from the comparison between the horizontal synchronization signal and a binary phase signal, wherein, **at each parasitic pulse among successive parasitic pulses between two synchronization pulses, the driving signal is alternately varied in the increasing direction and in the decreasing direction.**

Claim 1 patentably distinguishes over Applicants' admitted prior art and Akimoto et al. because neither Applicants' admitted prior art nor Akimoto teaches or suggests that a driving signal is alternately varied in the increasing direction and in the decreasing direction at each parasitic pulse among successive parasitic pulses. Rather, as discussed above, the system illustrated in FIG. 1 provides a driving signal S_c that varies in the same direction for each parasitic pulse. The system of Akimoto et al. removes equalizing pulses from the horizontal synchronizing signal. Therefore, claim 1 patentably distinguishes over Applicants' admitted prior art and Akimoto et al. Accordingly, withdrawal of this rejection is respectfully requested.

Claim 2 depends from claim 1 and is therefore patentable for at least the same reasons.

Claim 3 as amended recites:

A circuit for providing a horizontal scan control signal for a TV set from a horizontal synchronization signal contained in the composite video signal, the horizontal synchronization signal containing horizontal synchronization pulses and parasitic pulses, said circuit comprising a phase-locked loop receiving the horizontal synchronization signal comprising an oscillator generating an oscillating signal from which is provided the scan control signal, the frequency of the oscillating signal depending on a driving signal provided from the horizontal synchronization signal, and comprising **a means for correcting the driving signal which, at each parasitic pulse among successive parasitic pulses between two synchronization pulses, alternately varies the driving signal in the increasing and decreasing direction.**

Claim 3 patentably distinguishes over Applicants' admitted prior art and Akimoto et al. because neither Applicants' admitted prior art nor Akimoto teaches or suggests a means for correcting the driving signal which, at each parasitic pulse among successive parasitic pulses between two synchronization pulses, alternately varies the driving signal in the increasing and decreasing direction. Rather, as discussed above, the system

illustrated in FIG. 1 provides a driving signal S_c that varies in the same direction for each parasitic pulse. The system of Akimoto et al. removes equalizing pulses from the horizontal synchronizing signal. Therefore, claim 3 patentably distinguishes over Applicants' admitted prior art and Akimoto et al. Accordingly, withdrawal of this rejection is respectfully requested.

Claims 4-8 depend from claim 3, and are therefore patentable for at least the same reasons.

New Claims

New claim 9 recites:

A method of synchronizing an image signal with a synchronization signal that includes synchronization pulses, the method comprising:
receiving the synchronization signal;
providing a control signal to a phase-locked loop based on the synchronization signal;
determining a presence of parasitic pulses in the synchronization signal;
and
in response to determining the presence of the parasitic pulses, adjusting the control signal such that an average of the control signal is approximately zero.

Claim 9 patentably distinguishes over Applicants' admitted prior art and Akimoto et al. because neither Applicants' admitted prior art nor Akimoto teaches or suggests adjusting the control signal such that an average of the control signal is approximately zero, in response to determining the presence of the parasitic pulses.

Claims 10-13 depend from claim 9 and are therefore patentable for at least the same reasons.

New claim 14 recites:

A circuit for synchronizing an image signal with a synchronization signal that includes synchronization pulses, the circuit comprising:
a phase-locked loop that receives a control signal; and
a correction circuit that adjusts the control signal to have an average value of approximately zero, in response to determining a presence of parasitic pulses in the synchronization signal.

Claim 14 patentably distinguishes over Applicants' admitted prior art and Akimoto et al. because neither Applicants' admitted prior art nor Akimoto teaches or suggests a correction

circuit that adjusts the control signal to have an average value of approximately zero, in response to determining a presence of the parasitic pulses in the synchronization signal.

Claims 15-20 depend from claim 14 and are therefore patentable for at least the same reasons.

CONCLUSION

In view of the above amendment, applicant believes the pending application is in condition for allowance. A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

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Respectfully submitted,

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